

6. (Original) The apparatus of claim 5, wherein the combining circuit comprises a summation element for forming a sum of transition values and decision logic for comparing the sum to a threshold value.

7. (Original) The apparatus of claim 6, wherein the threshold value is set in accordance with an anticipated frequency range of the unknown clock signal.

8. (Currently Amended) A method of forming a number stream representing frequency or phase of digital or digitized clock signals using a digital circuit, one of the clock signals being a known clock signal and another of the clock signals being an unknown clock signal, comprising:

applying to the digital circuit an alias value indicating an expected frequency range of ~~the~~ a received unknown clock signal; and

forming the number stream in accordance with the alias value, said number stream representing the frequency or phase of the unknown clock signal.

9. (Currently Amended) A digital circuit for forming a number stream ~~for~~ representing frequency or phase of ~~digital or digitized clock signals, one of the clock signals being a known clock signal and another of the clock signal being an unknown~~ clock signal, comprising:

a first logic section including multiple chains of flip flops, each chain producing an intermediate value for each period of a known clock signal; and

a second logic section ~~for configured to receive~~^{the} an alias value indicating an expected frequency range of ~~the an~~ unknown clock signal and, in successive cycles of the known clock signal, and operable to compare the alias value to sums of the intermediate values produced by said multiple chain of flip-flops combining the intermediate values to form the number stream.